



Ford 6.4L Powerstroke Head Studs Installation Manual Ver. 1.0

Please read all instructions thoroughly before starting installation.

If you are installing new head gaskets:

1. Remove the existing head bolts, head and install new gasket. Keep the five bolts labeled on the provided diagram 11-15 (You will reuse these).
2. We recommend that you use a bottoming tap to prepare the threads in the block and be sure to get all oil, fuel, dirt, etc. out of the hole with compressed air (Don't forget the safety glasses).
3. Install the head studs into the locations shown as 1 through 10 in the diagram by hand (Put a small dab of engine oil onto the portion of the studs that will thread into the engine block itself). Make sure the stud "bottoms out" in the hole (only tighten the studs finger tight). Lower the head down over the studs and onto the gasket.
4. Put a small amount of Moly Assembly Lubricant onto the upper threads and on both sides of the provided washer. Torque the studs shown as 1 through 10 to **105 ft-lb** going in diagram's sequence (1, 2, 3...). After all have been torqued, loosen them, and repeat the torque sequence to **105 ft-lb**. Now again, loosen them, then torque in sequence to **105 ft-lb**. Once all studs have been torqued to 105 ft-lb, continue by tightening them in sequence to **145 ft-lb**. Finish by tightening all studs to **195 ft-lb**.

NOTE: It is a lot of work to torque, loosen, torque, loosen, torque, torque, and torque again.,. But it is WELL WORTH IT. Doing this helps seat the threads and will give you the VERY BEST RESULTS. Take the time to do it right so you never have to do it again!

5. Apply a small *amount of engine* oil to the threads on the bolts (11 through 15) mentioned in step one. Torque these in the 11-15 sequence to **18 ft-lbs**. Once all have been torqued, tighten them in sequence to **23 ft-lbs**.

DONE! Give your arms a rest!

If you are re-using the existing head gaskets:

1. Reference the supplied Torque Sequence Diagram and remove the head bolt labelled #1.
2. We recommend that you use a bottoming tap to prepare the threads in the block and be sure to get all oil, fuel, dirt, etc. out of the hole with compressed air (Don't forget the safety glasses).
3. Install a head stud into the hole by hand (Put a small dab of engine oil onto the portion of the studs that will thread into the engine block itself). Make sure the stud "bottoms out" in the hole (only tighten the stud finger tight).
4. Put a small amount of Moly Assembly Lubricant onto the upper threads and on both sides of the provided washer. Torque the stud to **105 ft-lb**, loosen it, torque again to **105 ft-lb**, loosen it, torque again to **105 ft-lb**. Now torque it to **145 ft-lb**.

NOTE: It is a lot of work to torque, loosen, torque, loosen, torque, torque and torque again.,. But it is **WELL WORTH IT**. Doing this helps seat the threads and will give you the **VERY BEST RESULTS**. Take the time to do it right so you never have to do it again!

5. Repeat steps 1-3 for bolt #2 on the diagram. Repeat and continue until the bolts labelled 1 through 10 are all torqued to **145 ft-lb**. Don't worry about the bolts labelled 11 through 15 (these only come into play if you replace the head gaskets).
6. Torque the studs labelled 1 through 10 in sequence to **195 ft-lb**

DONE! Give your arms a rest!

Give us a call if you have any questions. (719) 647-0232

